

Amendments to the Claims

Claims 1-3 (Canceled)

Claim 4 (Original) A liquid detoxification method for purifying liquid by removing microbes in untreated liquid, said method comprising steps for:

applying a microbe-separation treatment by filtration or centrifugal separation for removing comparatively large microbes present in said liquid, said filtration being performed by running said liquid through a filter or the like;

applying either one of chlorination or oxidization, said chlorination being performed by producing chlorine-containing substance from said liquid and feeding said chlorine-containing substance into said liquid to thereby kill microbes, and said oxidization being performed by adding oxidizing substance to said liquid; and

storing treated liquid into a tank for treated liquid.

Claim 5 (Original) The liquid detoxification method according to claim 4, further comprising a step for

applying a mechanical-treatment to said liquid for damaging microbes therein thereby to kill microbes before or after said step for applying a microbe-separation treatment.

Claims 6-9 (Canceled)

Claim 10 (Original) A detoxification method for purifying untreated seawater by removing microbes in untreated seawater, said method comprising steps for:

applying a microbe-separation treatment by filtration or centrifugal separation for removing comparatively large microbes present in said seawater, said filtration being performed by running said seawater through a filter or the like;

applying either one of chlorination or oxidization, said chlorination being performed by producing chlorine-containing substance from said seawater and adding the substance into said seawater to thereby kill microbes, and said oxidization being performed by adding oxidizing substance to said seawater; and

storing treated seawater into a ballast water tank.

Claims 11-14 (Canceled)

Claim 15 (Original) A detoxification apparatus for purifying liquid by removing microbes in untreated liquid containing untreated seawater, said apparatus comprising:

 a microbe-separation unit by filtration or centrifugal separation for removing comparatively large microbes present in said liquid, said filtration being performed by running said liquid through a filter or the like;

 either one of chlorination means or oxidization means, said chlorination means producing chlorine-containing substance from said liquid and feeding said substance into said liquid to thereby kill microbes, and said oxidization means adding oxidizing substance to said liquid; and

 a tank for storing treated liquid.

Claim 16 (Original) The detoxification apparatus for purifying liquid according to claim 15, further comprising:

 a mechanical treatment unit for applying a mechanical treatment to said liquid to damage and kill microbes present in said liquid before or after said microbe-separation unit.

Claims 17-21 (Canceled)

Claim 22 (Original) A detoxification method for purifying seawater by removing microbes in seawater stored in a ballast water tank, said method comprising steps for:

 applying a microbe-separation treatment by filtration or centrifugal separation for removing comparatively large microbes present in said seawater, said filtration being performed by running said seawater through a filter or the like;

 applying either one of chlorination or oxidization, said chlorination being performed by producing chlorine-containing substance from said seawater and feeding said chlorine-containing substance into said seawater to thereby kill microbes, and said oxidization being performed by adding oxidizing substance to said seawater; and

 discharging treated seawater out of said ballast water tank.

Claim 23 (Original) A detoxification method for purifying seawater by removing microbes in seawater stored in a ballast water tank, said method comprising steps for:

applying a microbe-separation treatment by filtration or centrifugal separation for removing comparatively large microbes present in said seawater, said filtration being performed by running said seawater through a filter or the like;

applying either one of chlorination or oxidization, said chlorination being performed by producing chlorine-containing substance from said seawater and feeding said chlorine-containing substance into said seawater to thereby kill microbes, and said oxidization being performed by adding oxidizing substance to said seawater; and

circulating said seawater to said ballast water tank.

Claim 24 (Previously Presented) The detoxification method for purifying seawater according to claim 22, further comprising a step for

applying a mechanical-treatment to said seawater for damaging microbes in said seawater thereby to kill microbes before or after said step for applying microbe-separation treatment.

Claim 25 (Previously Presented) The detoxification method for purifying seawater according to claim 22,

wherein said chlorination is performed in an electrolytic circulation system in which all or part of said seawater stored in said ballast water tank is introduced into a storing tank and circulated through a circulation line between said tank and an electrolyzer for electrolyzing said seawater thereby to obtain chlorine-containing substance, and said microbe separation treatment is performed to said seawater chlorinated in said electrolytic circulation system.

Claim 26 (Previously Presented) The detoxification method for purifying seawater according to claim 22,

wherein said chlorine-containing substance is composed by chlorine, sodium hypochlorite, sodium chlorite, chloric acid, or their ions or sodium chloride.

Claims 27-32 (Original)

Claim 33 (Original) A detoxification apparatus for purifying seawater stored in a ballast water tank by removing microbes in seawater, said apparatus comprising:

a microbe-separation unit by filtration or centrifugal separation for removing comparatively large microbes present in said seawater, said filtration being performed by running said seawater through a filter or the like;

either one of chlorination means or oxidization means, said chlorination means producing chlorine-containing substance from said seawater and feeding said substance into said seawater to thereby kill microbes, and said oxidization means adding oxidizing substance to said seawater; and

wherein said seawater previously treated in said microbe-separation unit and chlorination means or oxidization means is discharged out of said ballast water tank.

Claim 34 (Original) A detoxification apparatus for purifying seawater stored in a ballast water tank by removing microbes in seawater, said apparatus comprising:

a microbe-separation unit by filtration or centrifugal separation for removing comparatively large microbes present in said seawater, said filtration being performed by running said seawater through a filter or the like;

either one of chlorination means or oxidization means, said chlorination means producing chlorine-containing substance from said seawater and feeding said substance into said seawater to thereby kill microbes, and said oxidization means adding oxidizing substance to said seawater; and

wherein said seawater previously treated in said microbe-separation unit and chlorination means or oxidization means is circulated to said ballast water tank.

Claim 35 (Previously Presented) The detoxification apparatus for purifying seawater according to claim 33, further comprising

a mechanical treatment unit for applying a mechanical treatment to said seawater to damage and kill microbes present therein in downstream or upstream of said microbe-separation unit.

Claims 36-53 (Canceled)

Claim 54 (Previously Presented) The detoxification method for purifying seawater according to claim 23, further comprising a step for

applying a mechanical-treatment to said seawater for damaging microbes in said seawater thereby to kill microbes before or after said step for applying microbe-separation treatment.

Claim 55 (Previously Presented) The detoxification method for purifying seawater according to claim 23,

wherein said chlorination is performed in an electrolytic circulation system in which all or part of said seawater stored in said ballast water tank is introduced into a storing tank and circulated through a circulation line between said tank and an electrolyzer for electrolyzing said seawater thereby to obtain chlorine-containing substance, and said microbe separation treatment is performed to said seawater chlorinated in said electrolytic circulation system.

Claim 56 (Previously Presented) The detoxification method for purifying seawater according to claim 23,

wherein said chlorine-containing substance is composed by chlorine, sodium hypochlorite, sodium chlorite, chloric acid, or their ions or sodium chloride.

Claims 57-60 (Canceled)

Claim 61 (Previously Presented) The detoxification apparatus for purifying seawater according to claim 34, further comprising

a mechanical treatment unit for applying a mechanical treatment to said seawater to damage and kill microbes present therein in downstream or upstream of said microbe-separation unit.